

Amendments to the Claims

1. (Currently Amended) A method for reducing the amount of mercury affixed to a sorbent, the method comprising:

providing an amount of sorbent, at least a portion of the amount of sorbent comprising particulates having mercury compounds affixed to the particulates;
depositing the amount of sorbent on a floor of a fluidized bed conveyor, the floor comprising a metal media having openings; and

passing heated flowing air through the openings to move the amount of sorbent from a beginning to an exit area of the fluidized bed conveyor, ~~wherein the flowing air is passed through the openings until the sorbent reaches a temperature of at least 700°F and mercury compounds are liberated from at least some of the particulates,;~~

measuring an in process temperature of the sorbent when the sorbent is exposed to the heated flowing air;

removing at least a portion of the sorbent being exposed to the heated flowing air when the measured in process temperature reaches a temperature in the range of 700°F to 1000°F;

thereafter providing a second amount of sorbent, at least a portion of the second amount of sorbent comprising particulates having mercury affixed to the particulates;
and

thereafter maintaining the sorbent in the heated flowing air until the sorbent reaches a temperature in the range of 700°F to 1000°F.

wherein the fluidized bed conveyor is an air slide.

2. (Cancelled)

3. (Cancelled)

4. (Cancelled)

5. (Previously Presented) The method of claim 1 wherein:
the openings are 10 microns or less.

6. (Previously Presented) The method of claim 1 wherein:
the flowing air is passed through the openings at greater than 0 to about 10 cubic
feet per minute.

7. (Original) The method of claim 1, wherein the sorbent is activated
carbon.

8. (Cancelled)

9. (Original) The method of claim 1, further comprising:
reusing the sorbent in a mercury reduction process after mercury compounds are
liberated from at least some of the particulates.

10. (Previously Presented) The method of claim 1 further comprising:
preheating the amount of sorbent to a temperature of at least 300°F before
exposing the amount of sorbent to the flowing air.

11. (Currently Amended) A method for reducing the amount of mercury
adsorbed to activated carbon, the method comprising:

providing an amount of activated carbon, at least a portion of the activated
carbon having adsorbed mercury compounds;

depositing the amount of activated carbon on a floor of a fluidized bed conveyor,
the floor comprising a metal media having openings; and

passing heated flowing air through the openings to move the amount of activated
carbon sorbent from a beginning to an exit area of the fluidized bed conveyor wherein
the flowing air is passed through the openings until the activated carbon reaches a
temperature of at least 700°F;

measuring an in process temperature of the activated carbon when the activated
carbon is exposed to the heated flowing air;

removing at least a portion of the activated carbon being exposed to the heated
flowing air when the measured in process temperature reaches a temperature in the
range of 700°F to 1000°F;

thereafter providing a second amount of activated carbon, at least a portion of
the second amount of activated carbon having adsorbed mercury compounds; and

thereafter maintaining the activated carbon in the heated flowing air until the
activated carbon reaches a temperature in the range of 700°F to 1000°F.

wherein the fluidized bed conveyor is an air slide.

12. (Cancelled)

13. (Original) The method of claim 11 wherein:

the openings are 10 microns or less.

14. (Previously Presented) The method of claim 11 wherein:

the flowing air is passed through the openings at greater than 0 to about 10 cubic feet per minute.

15. (Canceled)

16. (Original) The method of claim 11, further comprising:

reusing the activated carbon in a mercury reduction process after mercury compounds are liberated from at least some of the activated carbon.

17. (Previously Presented) The method of claim 11 further comprising:

preheating the amount of activated carbon to a temperature of at least 300°F before exposing the amount of activated carbon to the flowing air.

18. (Currently Amended) A method for reducing the amount of mercury in an amount of particulate matter including fly ash and activated carbon, the method comprising:

providing an amount of particulate matter including fly ash and activated carbon, at least a portion of the fly ash or activated carbon having adsorbed mercury compounds;

depositing the amount of particulate matter on a floor of a fluidized bed conveyor, the floor comprising a metal media having openings; and

passing heated flowing air through the openings to move the amount of particulate matter sorbent from a beginning to an exit area of the fluidized bed conveyor, ~~wherein the flowing air is passed through the openings until the particulate matter reaches a temperature of at least 700°F and mercury compounds are liberated from at least some of the particulate matter;~~

measuring an in process temperature of the particulate matter when the particulate matter is exposed to the heated flowing air;

removing at least a portion of the particulate matter being exposed to the heated flowing air when the measured in process temperature reaches a temperature in the range of 700°F to 1000°F;

thereafter providing a second amount of particulate matter including fly ash and activated carbon, at least a portion of the fly ash or activated carbon having adsorbed mercury compounds; and

thereafter maintaining the second amount of particulate matter in the heated flowing air until the activated carbon reaches a temperature in the range of 700°F to 1000°F.

wherein the fluidized bed conveyor is an air slide.

19. (Cancelled)

20. (Cancelled)

21. (Previously Presented) The method of claim 1 wherein:
the floor is sloping.

22. (Previously Presented) The method of claim 11 wherein:
the floor is sloping.

23. (Previously Presented) The method of claim 18 wherein:
the floor is sloping.